

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESOLUTION NO. 70-45

PRESCRIBING REVISED REQUIREMENTS FOR WASTE DISCHARGE BY CENTRAL
CONTRA COSTA SANITARY DISTRICT INTO SUISUN BAY NEAR MARTINEZ,
CONTRA COSTA COUNTY AND RESCINDING RESOLUTIONS NOS. 82, 179 and 798

WHEREAS THIS REGIONAL BOARD HAS CONSIDERED

INFORMATION ABOUT THIS DISCHARGE

1. Central Contra Costa Sanitary District, called the discharger below, filed a Report on Waste Discharge dated November 10, 1969 with this Regional Water Quality Control Board pursuant to Section 13260(b) of the California Water Code.
2. That Report describes this existing waste discharge as about 19 mgd of sewage mixed with industrial waste from a present population of 275,000. The present treatment facilities are designed to serve a population of 300,000 persons and an average daily flow of 30 mgd; the discharger plans to expand them to serve 500,000 persons and 50 mgd. The outfall, a 72-inch pipe, discharges the waste into Suisun Bay near the Walnut Creek Channel through 11 diffuser ports about 35 feet below mean lower low water. This outfall is large enough to serve the proposed expansion.
3. This Regional Water Quality Control Board prescribed requirements for the discharger in Resolution No. 179, adopted February 17, 1955. This Board prescribed requirements on bypasses, which the discharger has since discontinued, in Resolution No. 82, adopted December 20, 1951. This Board also prescribed requirements on a proposed waste discharge, which was not made to Mt. Diablo Creek in Resolution No. 798, adopted November 17, 1966.
4. This Regional Board has stated intent to revise requirements for existing waste discharges to conform with the policy adopted by Resolution No. 67-30.

CORRESPONDENCE

This Regional Board has considered recommendations about this matter from:

1. Memorandum from State Department of Public Health dated February 4, 1970;
2. Memorandum from State Department of Water Resources, dated February 4, 1970;
3. Letter from Contra Costa County Health Department, dated January 27, 1970.

STAFF INVESTIGATION

1. These wastes can affect the following present beneficial water uses in Suisun Bay and contiguous water bodies:

Domestic water supply seasonally

Industrial cooling and process water supply year-round

Swimming, water-skiing, pleasure boating, marinas, fishing, and hunting

Fish and wildlife propagation and sustenance, and waterfowl and migratory birds habitat and resting

Navigation channels and port facilities

Esthetic enjoyment.

2. Land within 1000 feet of the Outfall is used for industry.

RESOLVED BY THIS REGIONAL BOARD

BOARD INTENT

1. Protect public health as it may be affected by this waste discharge.
2. Prevent nuisance, as defined in Section 13050(m) of the California Water Code.
3. Protect the beneficial water uses listed under "Staff Investigation" above.

WASTE DISCHARGE REQUIREMENTS - RECEIVING WATERS

1. The treatment or disposal of wastes shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharges shall not:
 - a. Unreasonably affect any of the protected beneficial water uses resulting from:
 - Floating, suspended, or deposited macroscopic particulate matter, or foam in waters of the State at any place;
 - Bottom deposits at any place;
 - Aquatic growths at any place;
 - Alteration of temperature, color or turbidity beyond present natural background levels in waters of the State at any place.

- b. Cause visible, floating, suspended or deposited oil or other products of petroleum origin in waters of the State at any place.
- c. Cause waters of the State to exceed the following limits of quality at any point within one foot of the water surface:

pH	7.0	minimum
	8.5	maximum
Dissolved oxygen	5.0 mg/l	minimum
Dissolved sulfide	0.1 mg/l	maximum
Nutrients	to be prescribed at the earliest practicable date	
Other substances	Any one or more substances in concentrations that impair any of the protected beneficial water uses or make aquatic life or wildlife unfit or unpalatable for consumption.	

- d. Cause waters of the State to exceed the following limits of quality at any place within one foot of the water surface:

Coliform Organisms	240 MPN/100 ml, median of five consecutive samples, maximum
	10,000 MPN/100 ml, any single sample, maximum

Whenever either of these bacterial values is exceeded in the receiving water for any reason they shall both be met instead in the waste at some point in the treatment process.

The discharger may demonstrate compliance in the waste stream as an optional alternative.

The Board will accept proof of effective effluent disinfection in terms of factors other than bacterial concentrations if the discharger documents a sound statistical correlation between such factors and bacterial analysis, and provided the conditions of sewage strength and treatment do not change from the demonstration period.

Analyses to be determined by the multiple-tube fermentation method using at least two portions per decimal dilution.

- e. Cause the waters of the State at any point east of the western end of Chipps Island and within 2000 feet of any diversion being used for a domestic water supply to exceed the following limits of quality:

Carbon chloroform extract	0.2	mg/l, maximum
Chromium, hexavalent	0.02	mg/l, maximum
Phenols	0.001	mg/l, maximum

The limited data available indicate that this concentration is not being met in the vicinity of Mallard Slough when it may be used as a diversion point for a domestic water supply, and that this apparent problem is not the sole responsibility of the discharger.

Upon further investigation of this matter, the Regional Board will determine whether or not correction is needed and, if so, will consider appropriate action with due regard for equitable apportionment of the necessary corrective action among the dischargers which are contributory to the problem.

WASTE DISCHARGE REQUIREMENTS - WASTE STREAM

The waste as discharged to waters of the State shall meet these quality limits at all times:

1. In any grab sample:

Settleable matter

The arithmetic average of any six or more samples collected on any day	0.5 ml/l/hr. maximum
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80% of all individual samples collected during maximum daily flow over any 30-day period	0.4 ml/l/hr. maximum
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Any sample	1.0 ml/l/hr. maximum
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2. 5-day, 20° C. BOD removal from the waste as indicated by analysis of 24-hour composite samples of effluent and influent shall be sufficient to maintain the dissolved oxygen concentration prescribed above. When the dissolved oxygen is less than the concentration prescribed above the BOD removal during the preceding 21 days shall be at least

Average	90%
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Not more than two consecutive daily determinations shall indicate BOD removals less than	80%
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3. In any representative, 24-hour composite sample:

Toxicity: the concentration of the waste itself in the receiving waters at any point within one foot of their surface	10 percent of the 96-hour TL _m concentration of the waste as discharged, maximum
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REPORTING REQUIREMENTS

This Resolution includes items numbered 1, 2, 3, 6, and 7 of the attached "Reporting Requirements", dated January 1, 1970.

NOTIFICATIONS

1. This Board's Resolutions Nos. 82, 179, and 798 are hereby rescinded.
2. This Resolution includes items numbered 1 through 7 of the attached "Notifications", dated January 6, 1970.

WILLIAM C. WEBER
Chairman

May 28, 1970

I, Fred H. Dierker, hereby certify that the foregoing is a true and correct copy of Resolution No. 70-45 adopted by the California Regional Water Quality Control Board - San Francisco Bay Region at its regular meeting on May 28, 1970.

FRED H. DIERKER
Executive Officer
CALIFORNIA REGIONAL WATER QUALITY CONTROL
BOARD - SAN FRANCISCO BAY REGION

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
January 1, 1970

REPORTING REQUIREMENTS

1. This Board requires the discharger to file technical reports on self-monitoring work performed according to detailed specifications developed pursuant to the Regional Board's Resolution No. 398. (Reference: Sections 13267(b) and 13268, California Water Code.)
2. This Board requires the discharger to file a written report within 90 days after the average dry-weather waste flow for any month equals or exceeds 80% of the design capacity of his waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.

The discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of his facilities.

The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for his waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units. (Reference: Sections 13260, 13267(b) and 13268, California Water Code.)

3. This Board requires the discharger to file a time schedule for engineering studies on facilities needed to comply with the Board's receiving water objective of 5.0 mg/l of dissolved oxygen and/or to file a time schedule for deciding upon the feasibility of participating in regional water quality control systems if he does not meet that dissolved oxygen objective after providing waste treatment facilities which comply with the effluent BOD requirement prescribed elsewhere in this Resolution. (Reference: Sections 13267(b) and 13268, California Water Code.)
4. This Board requires the discharger to file technical reports on studies into correcting violations of the Board's water quality objectives caused by discharging combined storm water and sewage. Specifications for these studies shall be developed pursuant to the Board's Resolution No. 398. (Reference: Sections 13267(b) and 13268, California Water Code.)

5. This Board requires the discharger to file written reports within 15 days after each calendar quarter to include:

Name of and number of lots in each subdivision for which an application has been received for connection to the sewerage system.
Anticipated date of connection of each subdivision to the sewerage system.

Finding and supporting data by governing body on effect of addition of each subdivision on violation of waste discharge requirements.

(Reference: Section 11551.6 Business and Professions Code and Sections 13267(b) and 13268, California Water Code.)

6. This Board requires the discharger to file a report on waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge. (Reference: Sections 13260(b) and 13264, California Water Code.)
7. This Board requires the discharger to file a written technical report at least 15 days prior to advertising for bids on any construction project which would cause or aggravate the discharge of waste in violation of these requirements; said report to describe the nature, costs, and scheduling of all actions necessary to preclude such discharge. In no case should any discharge of sewage bearing wastes be permitted without at least primary treatment and chlorination. (Reference: Sections 13267(b) and 13268, California Water Code.)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
January 6, 1970

NOTIFICATIONS

1. This Board requests the discharger to take note of the comments and recommendations contained in all the correspondence the Board has received and considered concerning this matter, and the Executive Officer is directed to transmit copies of that correspondence to the discharger.
2. This Board considers "Waters of the State" as defined in Section 13050(e) of the California Water Code to include waste waters over which the discharger has lost control.
3. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under Federal, State, or local laws, nor guarantee the discharger a capacity right in the receiving waters.
4. This Board will prescribe more restrictive requirements for this waste discharge if necessary:

To achieve or maintain dissolved oxygen concentration of at least 5.0 mg/l in tidal waters of the San Francisco Bay System pursuant to Resolution No. 67-30,

To protect shellfishing areas which the Board designates pursuant to Resolution No. 803,

To protect the beneficial water uses, and to achieve other objectives adopted in the resolutions cited above.

5. This Board will review these requirements periodically, as required by law, and will notify the responsible persons before doing so. (Reference: Section 13263(e), California Water Code.)
6. The water quality parameters used in this resolution are as defined in the latest edition of "Standard Methods for the Examination of Water and Wastewater" by the American Public Health Association.
7. The discharger is advised that this Board will use the general concepts of Phase I of the plan recommended by the Final San Francisco Bay-Delta Program Report as guidelines in reviewing any application for construction grants for sewerage facilities proposed to comply with these requirements, and if the discharger intends to make such application he must demonstrate the compatibility of the proposed facilities with the general concepts of the Bay-Delta Program.